



OPERATING INSTRUCTIONS



PM-9901 DIRECT DRIVE TURN TABLE

TURN TABLE

PRECAUTIONS

Thank you for purchasing this fine product – STEREO TURNTABLE.

Taking time to read these operation instructions carefully.

Read this manual carefully before using the unit and be sure to store the manual in a safe place for future reference.

1. Power sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local Power Company.

2. Installation precautions

Do not install the unit in any of the following locations since this may result in a deterioration in performance or malfunction:

- Locations exposed to direct sunlight or near object radiating heat such as heating appliances.
- Locations exposed to moisture or humidity.

- Cartridge may pick up slight sound pressure or vibrations of the speakers coming along the floor or through the air resulting in feedback or howling sound. Find a location which is very stable and vibration free.
- The legs have functions for adjusting the height of the unit itself. Adjust the legs to stabilize the main body horizontally..

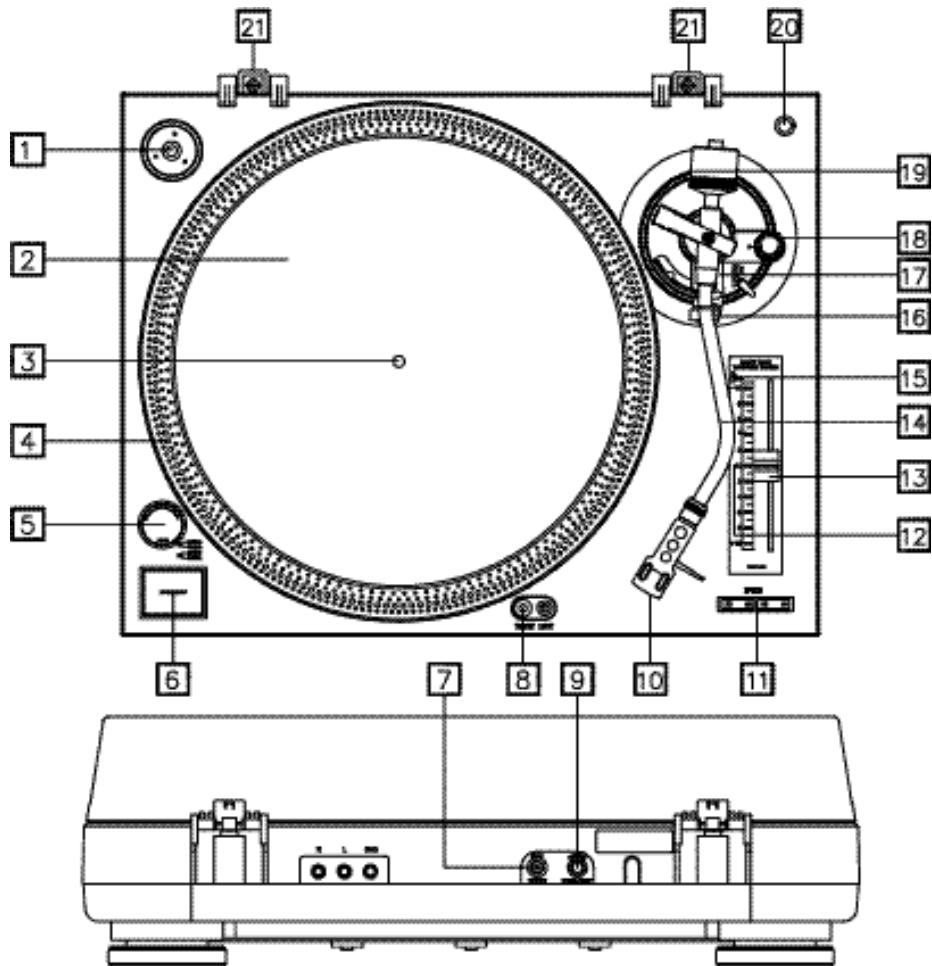
- 3. The model may not be able to perform at its best in an extremely cold environment. The optimum ambient temperature range is 0°C to 35°C.

OPERATION PRECAUTIONS

1. Always clean the stylus both before and after playing a record with a soft brush, and try to make it a rule to clean the record with a soft brush and try to make it a rule to clean the records with a good quality cleaner.
2. Be careful not to make the turntable vibrate while a record is playing, since this can result in damage to the stylus and record.
3. When clamping over the headshell, clamp the tonearm to the arm rest so that the tonearm shaft is not strained in any way.

4. Place only one record at a time on the platter. If two or more records are stacked on the platter, the stylus will not make proper contact with the grooves, and this will impair the quality of reproduction.
5. Volatile materials should not be used, such as : alcohol, thinner, benzene etc. They may remove the paint or damage the lustre, please avoid.

NAME OF PARTS



- 1). 45-rpm Adaptor
- 2). Slip Mat
- 3). Center Spindle
- 4). Strobe Dots
- 5). Power Switch / Strobe
- 6). Start/Stop Button
- 7). Beat Out : Frequency output of beat out is 675Hz while pitch is in middle position 0%
- 8). Taget Light
- 9). Remote Control : This jack can be connected with an external switch to perform the Start/Stop operation.
- 10). Headshell
- 11). Speed Select Buttons
- 12). LED display for speed indication Green LED : the pitch control slider is in center click position and the speed is quartz-controlled.
Red LED : the speed was changed with the pitch control slider
- 13). Pitch Control Slider
- 14). Tonearm
- 15). Trim control for changing the range of the pitch control
- 16). Arm Rest
- 17). Cueing Lever
- 18). Anti-skate Knob
- 19). Counterweight
- 20). Position for Preparing Cartridge
- 21). Hinge for Dust Cover

BEFORE USE

Check following parts included in the package with the main unit:

- 1) Turntable platter
- 2) Slip mat
- 3) Dust cover
- 4) 45-rpm adaptor
- 5) Counterweight
- 6) Headshell
- 7) Operating instructions

*Notes:

- 1) Do not connect the AC power plug before assembly has been completed.
- 2) Before turn on the power, check that the voltage settings is correct.
- 3) Read this manual carefully before using the unit and be sure to store the manual in a safe place for future reference.

PLACEMENT

- Do not place the unit in a location where it will be exposed to direct sunlight or near a heating appliance.
- Do not place the unit in a location where there is high humidity or a lot of dust.
- Cartridge may pick up slight sound pressures or vibrations from the speakers coming along the floor or through the air resulting in howling. Find a location which is very stable and vibration free.
- The legs have functions for adjusting the height of the unit itself. Adjust the legs to stabilize the main body horizontally.

MAINTENANCE

- Clean the stylus periodically with a soft brush to prevent the accumulation of dust.
- When the sound becomes distorted or noisy, check the stylus. If worn out, replace it with a new one.
- From time to time, the dust cover and turntable cabinet should be wiped with a soft, dry cloth.
- Any volatile materials such as alcohol, thinner, benzine, etc., may remove the paint or damage the lustre and should not be used.

CONNECTIONS

1. Connect the power cord to the auxiliary power outlet on the rear panel of your amplifier or receiver or to a household AC outlet.

2. Connect the unit output terminals to the PHONO jack of your amplifier or receiver.

Output terminals	Amplifier(Receiver)
L (White)	L Channel
R (Red)	R Channel
GND (Spade)	GND

NOTE:

Be sure to connect the ground terminal firmly to the amplifier or receiver.

If this connection is not made or is loose, a power source " HUM " will result.

SPECIFICATIONS

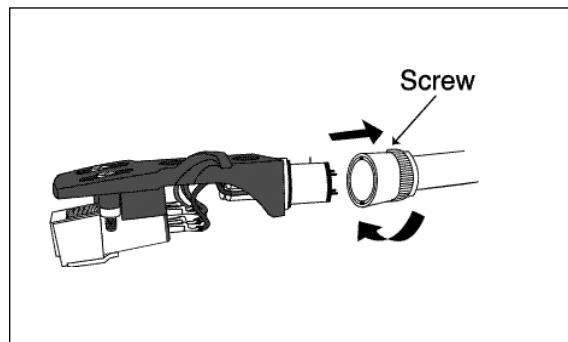
General

Power supply	AC 230V~ 50/60Hz
Power consumption	12 Watts
Dimension(WxDxH)	450 x 350 x 145 mm
Weight	9.6 Kgs

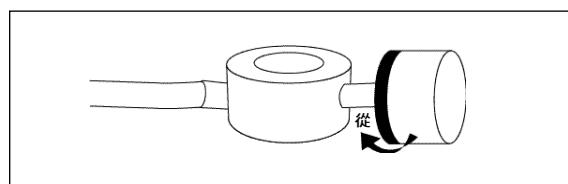
For improvement purposes, specifications and design may be changed without notice.

ASSEMBLY

1. Remove the main unit with the packing from the box and take off the packing.
2. Set the 45-rpm adaptor on the main unit.
3. Insert the turntable platter onto the center spindle.
4. Set the slip mat on the platter.
5. Installation of cartridge:
When installing a cartridge, refer to the operating instructions of that cartridge.
During installation, attach the stylus protector to guard the stylus tip from damage.
- (1) Connect the lead wires to the cartridge terminals. The terminals of most cartridges are color coded.
Connect each lead wire to the terminal of the same color.
White (L+) Left channel+
Blue (L-) Left channel-
Red (R+) Right channel+
Green (R-) Right channel-
- (2) Install the cartridge to the headshell and tighten it with screws provided with the cartridge.

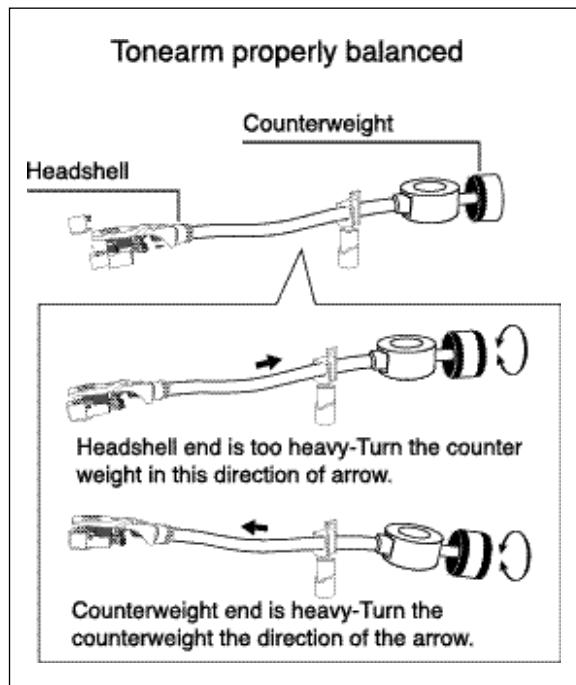


6. Insert the headshell into the front end of the tonearm, then turn the lock nut clockwise with the headshell firmly held horizontally.
7. Slide counterweight onto tonearm.
Twist it lightly and it will screw onto the rear shaft of the tonearm.

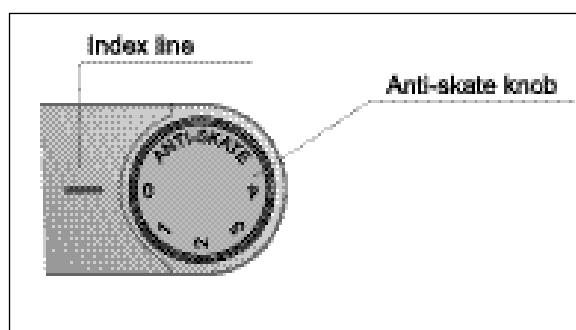


8. Adjustment of horizontal zero (0) balance and stylus pressure:
 - (a) Remove the stylus protector, do not touch the stylus tip during the adjustment.
 - (b) Set the cueing lever to the lower position.
 - (c) Release the arm clamp and lift the tonearm from the arm rest to free it.

- (d) Rotate the counterweight until the tonearm is approximately balanced horizontally (floats freely).
- (e) Refasten the tonearm with the arm clamp.
- (f) Hold the counterweight stationary with one hand and rotate only the stylus-pressure ring to bring the number "0" of the ring into alignment with the center line on the tonearm rear shaft.



- (g) Rotate the counterweight clockwise until the scale shows the value corresponding to the pressure of the used stylus. The stylus pressure of the installed pick-up system is 2 g. If you use a separate pick-up system, please follow the manufacturer's instructions.
9. Set the anti-skating control knob to the same value as the stylus pressure.



10. Install the dust cover to the main unit.

OPERATION

1. Push the power button to turn on the power, the speed indicator and the strobe-illuminator will light up.
2. Place a record on the slip mat, when playing a 45rpm record with a large center hole, place the 45-rpm adaptor on the center spindle.
3. Set the speed to match the record.
4. Remove the stylus protector, release the arm clamp.
5. Set the cueing lever to the up position.
6. Press the Start/Stop button, the turntable platter will start to rotate.
7. Move the tonearm over the desired groove.
8. Set the cueing lever to the down position, the tonearm will descend slowly onto the record and play begins.
9. When play is finished, raise the cueing lever, move the tonearm to the arm rest, secure the tonearm with the arm clamp.
10. Press the Start/Stop button to stop the platter rotating, push the power button to turn off the power.

Suspend play

Set the cueing lever to "UP"position during play, the stylus tip of the cartridge will be lifted from the record.

Target light

This unit is provided with a target light for illuminating the stylus tip during play.

Push the target light button, the target light will be raised into position for illuminating the stylus tip. When not in use, keep the target light lowered through depression.

CHANGING THE SPEED

As long as the pitch control (13) is in center click position, the turntable is operated with quartz-controlled rated speed. The green LED (12) will then be lit.

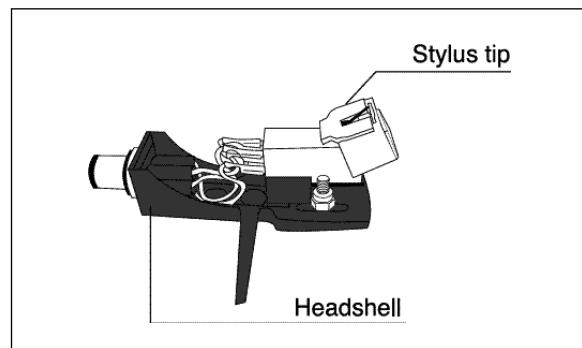
The speed can be increased or decreased by 10% via the pitch control (13). The red LED (12) will then be lit. If the change of speed does not correspond to the pitch control change, it is possible to correct this with the trim control (15).

An incorrect adjustment done on purpose can also be used to have the turntable rotate extremely slow or fast. The strobe dots (4) at the edge of the turntable issued for speed monitoring.

STYLUS REPLACEMENT

The life expectancy of the stylus tip is 500 hours. For the sake of maximum sound quality reproduction, we recommend replacement within the minimum time limit.

1. The stylus tip is replaced by grasping the stylus holder and pulling it away from the body of the cartridge.
2. The new stylus tip is then inserted by pushing it into the receptacle.

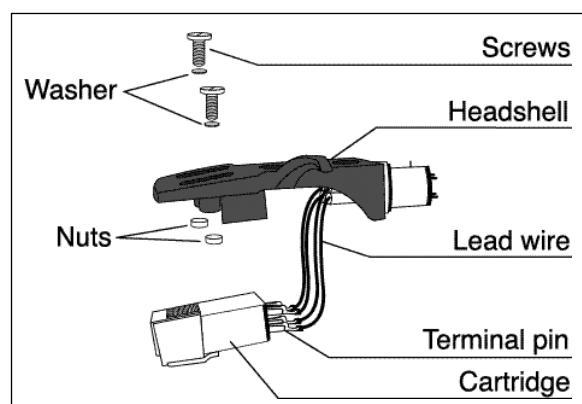


CARTRIDGE REPLACEMENT

Remove the headshell from the tonearm, and the screws that hold the cartridge. Pull out the four lead wires from the cartridge itself. To protect the lead wires at this point, remove the terminal pins with pliers or the tip of the screwdriver.

The terminals on the accessory headshell are aligned according to the arrangement below. Check the location and polarity of each of the cartridge's terminal pins and then connect the lead wires, taking care not to get the polarities mixed up.

Red	: Right channel
White	: Left channel
Green	: Right channel ground
Blue	: Left channel ground



GENERAL SPECIFICATION

1. APPLICATION :

This specification applies to the Direct drive turntable unit PM-9901

2. TURNTABLE SECTION:

Type	2-speed full manual
Motor	8 pole, 2phase, brushless DC motor
Driving Method	Direct Drive
Turntable platter	330mm dia. Aluminum diecast
Speeds	33-1/3 and 45 rpm
Wow and Flutter	Less than 0.15% WRMS(JIS WTD)
S/N ratio	More than 55 dB(DIN-B)
Pitch Controls	+/- 10%
Starting Time	Less than 1 sec.
Time for speed change	Less than 1 sec.
Beat Output	675 +/- 1Hz(pitch control set 0%)
High of cue (first track)	6~10.5mm

3. TONEARM SECTION

Type	Static balanced S-shaped tone arm with detachable headshell
Effective Arm Length	220mm
Overhang	10mm
Tracking error	Less than 3 degree
Tracking Force Adjustment range	0-4g
Applicable cartridge weight	6-10g
Anti-skating range	0-4g
Needle Pressure range	1.5-2g

4. GENERAL SECTION:

Power Supply	AC 230V ~ 50Hz
Power consumption	12 Watts
Dimensions	450(W) x 350(D) x 145(H) mm
Weight	9.6Kgs

5. SPECIFICATION:

DESCRIPTIONS	UNIT	NOMINAL	LIMIT
(1) Output Difference	dB	2.3	2.5
(2) Output Level	mv	1.7~3.5	1.5~3.5
(3) Speed (Speed range)	Hz	2.7K , 3.3K	2.7K , 3.27K
(4) Speed (Center Range)	Hz	2995~3005	2990~3010
(5) Wow and Flutter	%	0.13	0.15
(6) Channel separation	dB	16	15

TROUBLE SHOOTING

Sometimes, an operational fault can be mistaken for a malfunction or failure. Check the following points and see if you can find the symptoms of the trouble below before you get in touch with the serviceman. If you cannot locate the symptoms, contact your nearest dealer.

Symptom	Possible Trouble	Remedy
Platter does not rotate.	Power cord is unplugged.	Plug cord securely into wall outlet.
No Sound	Phono cables are not connected properly.	Connect cables securely to the PHONO input jacks on the amplifier.
	Headshell is not properly attached.	Firmly secure tonearm locking collar (see page 4).
	Cartridge lead wires are loose.	Attach lead wires inside headshell properly.
	Amplifier is not being operated properly. (function switch, tape monitor switch, speak switches, etc. are not set correctly).	Read the operating instructions that come with amplifier.
Musical tempos off.	Platter speed is not set properly.	Refer to "Operation" and their uses on page 5.
	SPEED ADJUSTMENT knob is not set properly in accordance with the platter speed.	Refer to "Operation" on page 5.
Excessive noise.	Ground lead is not connected.	Connect properly to the amplifier's ground terminal.
	Tracking force is not correct.	Refer to tracking force adjustment on page 4.
	Dust or dirt has collected on the stylus tip.	Clean the stylus tip with a soft brush.
	Dust or dirt has collected on the record.	Clean the record with a good quality cleaner.
Sound is distorted.	Dust or dirt has collected on the stylus tip.	Clean the stylus tip with a soft brush.
	Tracking force is not correct.	Refer to tracking force adjustment on page 4.
	Stylus is worn.	Replace with new stylus.
	Amplifier's tone controls are set too high.	Set tone controls to lower position.
Tonearm does not descend.	Cueing Lever is set to UP position.	Set to DOWN position.
Intermittent sound.	Tracking force is not correct.	Refer to tracking force adjustment on page 4.
	Stylus is worn.	Replace with new stylus.
	Record is scratched or warped.	Replace record.